

## Product datasheet

# Human IL-10 ELISA Kit, Fluorescent ab229436

CatchPoint<sup>®</sup> SimpleStep<sup>®</sup> ELISA<sup>™</sup>

[4 Images](#)

### Overview

**Product name** Human IL-10 ELISA Kit, Fluorescent

**Detection method** Fluorescent

**Precision**

Intra-assay

Sample	n	Mean	SD	CV%
supernatant	5			5.2%

Inter-assay

Sample	n	Mean	SD	CV%
supernatant	3			3.2%

**Sample type** Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

**Assay type** Sandwich (quantitative)

**Sensitivity** 2.1 pg/ml

**Range** 2.3 pg/ml - 4800 pg/ml

**Recovery**

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	108	105% - 111%
Serum	109	108% - 112%
Cell culture media	106	102% - 111%
Hep Plasma	116	113% - 117%
EDTA Plasma	109	103% - 118%
Cit plasma	111	105% - 119%

<b>Assay time</b>	1h 30m
<b>Assay duration</b>	One step assay
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Does not react with:</b> Cow
<b>Product overview</b>	IL-10 <i>in vitro</i> CatchPoint SimpleStep ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of IL-10 protein in human serum, plasma, and cell culture supernatant samples

The CatchPoint SimpleStep ELISA employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. CatchPoint HRP Development Solution containing the Stoplight Red Substrate is added. During incubation, the substrate is catalyzed by HRP generating a fluorescent product. Signal is generated proportionally to the amount of bound analyte and the intensity is measured in a fluorescence plater reader at 530/570/590 nm Excitation/Cutoff/Emission.

Interleukin 10 (IL-10) is a cytokine involved in immunoregulation through the promotion of Th2 response and inhibition of Th1 responses. It is produced by cells of hematopoietic origin, keratinocytes, placental cytotrophoblasts, and hepatic stellate cells.

<b>Tested applications</b>	<b>Suitable for:</b> Sandwich ELISA
<b>Platform</b>	Pre-coated microplate (12 x 8 well strips)

## Properties

<b>Storage instructions</b>	Store at +4°C. Please refer to protocols.
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Components	1 x 96 tests
100X Stoplight Red Substrate	1 x 120µl
10X Wash Buffer PT ( <a href="#">ab206977</a> )	1 x 20ml
500X Hydrogen Peroxide (H2O2, 3%)	1 x 50µl
50X Cell Extraction Enhancer Solution	1 x 1ml
Antibody Diluent CPI	1 x 6ml
10X Human IL-10 Capture Antibody	1 x 600µl
10X Human IL-10 Detector Antibody	1 x 600µl
Human IL-10 Lyophilized recombinant Protein	2 vials
Plate Seals	1 unit

Components	1 x 96 tests
Sample Diluent NBP	1 x 20ml
Sample Diluent NS ( <a href="#">ab193972</a> )	1 x 50ml
SimpleStep Pre-Coated Black 96-Well Microplate	1 unit
Stoplight Red Substrate Buffer	1 x 12ml

<b>Function</b>	Inhibits the synthesis of a number of cytokines, including IFN-gamma, IL-2, IL-3, TNF and GM-CSF produced by activated macrophages and by helper T-cells.
<b>Tissue specificity</b>	Produced by a variety of cell lines, including T-cells, macrophages, mast cells and other cell types.
<b>Sequence similarities</b>	Belongs to the IL-10 family.
<b>Cellular localization</b>	Secreted.

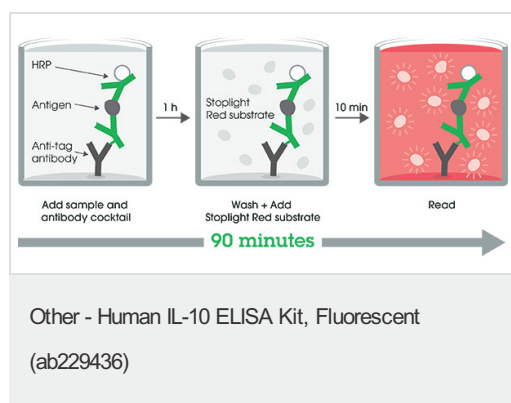
## Applications

Our [Abpromise guarantee](#) covers the use of **ab229436** in the following tested applications.

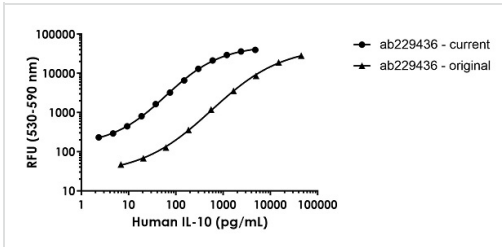
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration.

## Images

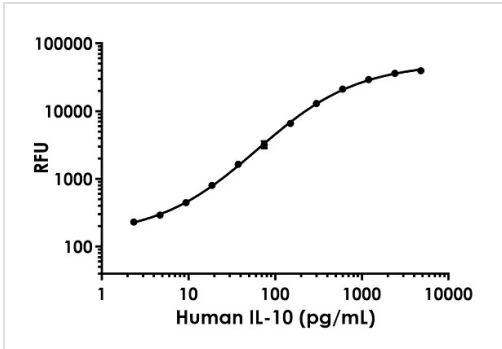


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



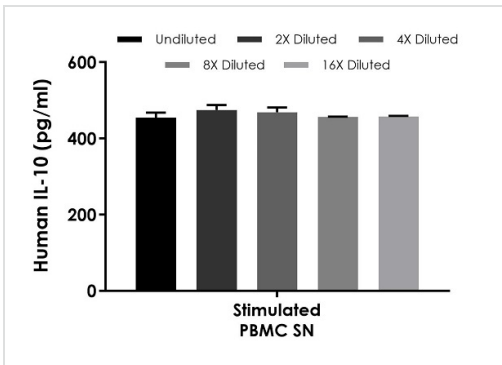
Human IL-10 Standard Curve Comparison

Standard Curve comparison between human IL-10 current (new) SimpleStep ELISA kit and original ELISA kit. The current SimpleStep ELISA kit shows increased sensitivity.



Example of human IL-10 standard curve in Sample Diluent NS + Enhancer.

The IL-10 standard curve was prepared as described in Section 10. Raw data generated on SpectraMax M4 Multi-Mode Microplate Reader is shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



Interpolated concentrations of native IL-10 in human PBMC cell culture supernatant samples.

The concentrations of IL-10 were measured in duplicates, interpolated from the IL-10 standard curves and corrected for sample dilution. Undiluted samples are as follows: stimulated PBMC cell culture supernatant 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL-10 concentration was determined to be 462 pg/ml in stimulated PBMC cell culture supernatant. PBMC cell culture supernatant samples were stimulated for 46 hours with 1.5% PHA. Unstimulated PBMC cell culture supernatant samples were also measured; all values were below the detectable range of the assay.

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